

STAT

7 April 1965

MEMORANDUM FOR: Deputy Assistant Director, OCS
THROUGH : Chief, Plans Staff
SUBJECT : Development Division Input to Plan for
Agency Hardware/Software System

Introduction

This memorandum contains the Development Division's projection of hardware and software requirements for the period 1 June 1965 through 31 December 1969. It also presents cut over plans dictated by the installation of new equipment or the initiation of new projects or project phases. Training requirements and schedules are broken out as a separate item.

Training Requirements (by activity)

ALP Project

Training will become a subject of importance to this activity when it is necessary to go from the ALP 1401 to the 360/60 in May 1966. To use the 360/60, it is suggested that existing 1401 programs be rewritten for the 360/60 under a contract agreement.

CRIVE RSP System (Development Programming)

Due to the uncertainty of acquiring programmer trainees, the computer time requirements for this activity are subsumed under the requirements for development programming. No schedule can be submitted at this time. Training, as it occurs, will be in the use of the 360 Assembly Language. Later on there will be training in the use of a procedure oriented language.

CHIVE NDP System (Support Programming)

Training requirements from 1 June 1965 through 31 December 1966 are estimated as follows:

16 hours of computer time (7090, 360/30, 360/60)

360 Assembly Language and associated assemblers
for 7090, 360/30, and 360/60

Starting in January 1967 training requirements are included in the estimates provided for the development of the Operational System.

Development and Operations Requirements (by activity)

ALP Project

Hardware

1 June 1965 - 1 Sept. 1965--Present techniques

1 Sept. 1965 - 31 May 1966--On-line

1401
1402 card reader
1403 printer
729 V tape drive
1903 paper tape reader
ALP Processor (special
purpose--includes
photostore and core
memories)

Off-line

Steno. Mark Reader (SMR)
(special purpose) 729 V
tape drive

Estimated equipment use: 2-5 hours/day

1 June 1966 - 31 Dec. 1969--(All estimates presume a decision to continue the project)

Similar equipment to that above except that the 360/60 is used for I/O functions.

Estimated 360/60 use: $\frac{1}{2}$ - 1 hour/day

Software

1 June 1965 - 31 May 1966--Use standard 1401 software package--Autocoder, etc.

1 June 1966 - ³¹13 Dec. 1969--No projection feasible at this time.

CHIVE RDP System (Development and Operations)

Hardware

1 June 1965 - 1 August 1965--no requirement

1 Aug. 1965 - 1 Nov. 1965--7090

Estimated equipment use: 26 hrs./month

1 Nov. 1965 - 1 April 1966--360/30

Estimated equipment use: 35 hrs./month

1 April 1966 - ³¹13 Dec. 1966--360/60

Estimated equipment use: 22 hrs./month

1 Jan. 1967 - 31 Dec. 1969:

<u>Units</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
1 - 360/60	15%*	28%	47%
1 - 1403 Printer	13%	20%	20%
8 - 2400 Tapes	5%	8%	8%
1 - Disk Storage	13%	10%	10%
1 - Page Reader	13%	25%	50%
1 - 2321 Data Call	0	10%	10%
1 - Remote Console		Experimental	

<u>Data Volume</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
2321 Data Cell	0	112	212*
Disk Storage - Temporary	45	29	70
- Permanent	10	10	10

*Millions of bytes.

Additional hardware requirements to convert and use the SR Detail Index File**

1 April 1966 - 31 Dec. 1966--360/60

Estimated equipment use: 35 hours per month of card reading and tape handling; 2 hours per month of CPU time (program test and file building).

<u>Units</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
1 - 360/60	2%	4%	8%
1 - 1403 Printer	4%	8%	12%
8 - 2400 Tapes	0	0	0
1 - Disk Storage	1%	1%	1%
1 - Page Reader	0	0	0
1 - 2321 Data Cell	30%	35%	40%
1 - Remote Console		Experimental	

<u>Data Volume</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
2321 Data Cell	1,250	1,330	1,410*
Disk Storage - Temporary	0	0	0
- Permanent	0	0	0

Software

Initial implementation will use the 360 Assembly Language, associated assembler, and IBM supplied utilities. ^{Procedure} Problem oriented languages such as COBOL are under consideration but they would not be used until some time after June 1966.

**This is not a firm requirement at this time. The magnitude of the task and the resulting file indicates a need for further analysis.

CHIVE Support Programs Development

Hardware

- 1 June 1965 - 1 July 1966--7090, 360/60, and 360/30
Estimated equipment use: 22 hrs./month (360/30)
Estimated equipment use: 5 hrs./month (7090 or 360/60)
- 1 July 1966 - 1 Jan. 1967--360/60
Estimated equipment use: 3 hrs./month

Software

Initially all programmers will use the 360 Assembly Language and associated assembler. The development of support programs after 1 July 1966 may use a procedure oriented language.

Get Over Schedule

ALP

- 1 June 1965 - 1 ^{Sept} Aug. 1965 : Present ^{techniques} equipment
1 ^{Sept} Aug. 1965 - 31 May 1966 : ALP 1401 and associated equipment
1 June 1966 - 31 Dec. 1969: 360/60 and ALP equipment

CHIVE

- 1 June 1965 - 1 Aug. 1965 : 7090
1 Aug. 1965 - 1 April 1966 : 7090 and 360/30
1 April 1966 - 31 Dec. 1966: 360/30 and 360/60
1 Jan. 1967 - 31 Dec. 1969 : 360/60

STAT

STAT

STAT

Distribution:

Orig. - Addressee

1

1

1

Approved For Release 2004/12/22 : CIA-RDP80B01139A000600180038-8

(File)

